

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,877	12/29/2005	. Osamu Nabeya	2005-2017A	6892
	7590 02/05/200 I, LIND & PONACK, I	EXAM	EXAMINER	
2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			SCRUGGS, ROBERT J	
			ART UNIT	PAPER NUMBER
			3723	
. *				
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	· MAIL DATE	DELIVERY MODE	
3 MONTHS 02/05/2007		PAI	PER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/562,877	NABEYA ET AL.			
		Examiner	Art Unit			
	·	Robert Scruggs	3723			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•		*			
1)	Responsive to communication(s) filed on 30 N	ovember 2006.				
, —	·	action is non-final.				
.3)	,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
_۳/ا	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	ion of Claims		•			
4) 又	4)⊠ Claim(s) <u>15-34</u> is/are pending in the application.					
	4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
•	⊠ Claim(s) <u>15-34</u> is/are rejected.					
7)	Claim(s) is/are objected to.	·				
8)□	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>30 November 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
•		priority under 35 U.S.C. & 119/a	a)-(d) or (f).			
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)	a) All b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.						
	rmation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal	Patent Application			
	er No(s)/Mail Date	6) Other:				
I.C. Batant and	Trademark Office					

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DETAILED ACTION

1. This office action is in response to the amendment received on November 30, 2006. Applicant has cancelled claims 1-14 and added claims 15-34 therefore claims 15-34 will be fully examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 15, 17, 18, 20-22, 24, 25, 27, 28, 30-32 and 34 are **Finally** rejected under 35 U.S.C. 102(e) as being anticipated by Numoto (6840845).

In reference to claims 15, 17, 25 and 27, Numoto discloses a polishing apparatus comprising, a polishing surface formed as the upper surface of pad (20), a top ring (Figure 1) (14) for holding a workpiece (W), said top ring including a retaining ring for holding a peripheral edge portion of the workpiece, the retainer ring formed as a first ring member (28) having an engagement portion formed as an annular projection (56), a second ring member (50) having a second engaging portion formed as recess with an annular groove (54) and a bolt (58) detachably fastening said first ring member to a lower surface of said second ring member (Column4, Lines 23-29).

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In reference to claims 18 and 28, Numoto shows in figure 2 that the first ring member (28) is brought into contact with said polishing surface.

In reference to claims 20 and 30, Numoto inherently discloses that when the first ring member (28) is replaced it will constitute a regeneration of said retaining ring since another first ring member can be placed in its place.

In reference to claims 21-24 and 31-34, Numoto discloses that the bolt (58) is screwed through said second ring member (50) into said annual projection (56).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 16, 23, 26 and 33 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Numoto (6840845) in view of Zuniga et al. (6251215). Numoto discloses the claimed invention previously mentioned above, but lacks, having the first ring member made from resin and the second ring member made from metal. However, Zuniga et al. discloses a polishing apparatus comprising, a polishing surface (Figure 3) (32), a top ring (Figure 2) (164) for holding a workpiece (10) and including a retaining ring (110) for holding a peripheral edge portion of the workpiece, said retainer ring

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including a first ring member (180) formed from a polyphenylene sulfide resin material (Column 5, Lines 65-67) and a second ring member (184) formed from a metal material (Column 5, Lines 29-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first and second retaining ring members, of Numoto, with a first ring member made from resin and a second ring member made from metal, in view of Zuniga et al. in order to provide a retaining ring that reduces the edge effect during polishing and wherein the resulting flatness and finish of the substrate are improved.

6. Claims 19 and 29 are **Finally** rejected under 35 U.S.C. 103(a) as being unpatentable over Numoto (6840845) in view of Zuniga et al. (6251215) and Kuo et al. (2002/0155797). Numoto discloses the claimed invention previously mentioned above, but lacks, having abrasive particles dispersed within the first ring member. However, Kuo et al. discloses a retaining ring including a first ring member (313') formed from a polyphenylene sulfide resin material and including abrasive particles dispersed therein (Paragraphs 12 and 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the first ring member, of Numoto, with a first ring member having abrasive particles dispersed therein, in view of Kuo et al. in order to avoid abrasive aggregation in the pipe of the polishing slurry supply mechanism.

Response to Arguments

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant's arguments with respect to claims 15-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Scruggs whose telephone number is 571-272-8682. The examiner can normally be reached on Monday-Friday, 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RS

LEE D. WILSON